A Guide for National Weather Service Storm Spotters

National Weather Service Office Shreveport, Louisiana

IMPORTANT NAMES, ADDRESSES AND PHONE NUMBERS

National Weather Service Office 5655 Hollywood Ave Shreveport, LA 71109-7750

Meteorologist-in-Charge Armando L. Garza, MIC

Warning Coordination Meteorologist Mark Frazier, WCM

Mark.Frazier@noaa.gov

SKYWARN Director/Instructor Mark Frazier, WCM

PHONE NUMBERS

Administrative (information requests, forecasts, etc.) (318) 631-3669 (830 am - 12:00 pm and 1:00 pm - 400 pm Mon thru Fri)

Leave message and your call will be returned as soon as possible.

To Schedule Spotter or Safety Training, or to discuss (318) 636-4594

SKYWARN business...

THESE NUMBERS ARE UNLISTED AND RESTRICTED TO EMERGENCY USE

To Report Severe Weather 24 hours a day, 365 days a year

If You Live in Louisiana 800-922-1386

If You Live in Texas, Oklahoma, Arkansas 800-551-8338

INTERNET

SKYWARN e-mail Mark.Frazier@noaa.gov NWS Shreveport homepage http://www.srh.noaa.gov/shv

SKYWARN (2-METER) HAM RADIO -KC5PBS - FREQ: 146.670 Shreveport SKYWARN (2-METER) HAM RADIO -KI5UA - FREQ: 147.340 Longview

Local SKYWARN frequencies enclosed in this document.

National Weather Service SKYWARN Emergency Network

All amateur radio operators are encouraged to participate in the National Weather Service's SKYWARN spotter network. This is the fastest way to get your critical severe weather report directly to the National Weather Service!

SKYWARN is activated by the National Weather Service in Shreveport anytime severe thunderstorms threaten southwest Arkansas, northwest and north central Louisiana, northeast Texas, and extreme southeast Oklahoma. Amateur radio operators man a station at the NWS office and collect reports from the entire area.

Remember these important SKYWARN frequencies:

NATIONAL WEATHER SERVICE SKYWARN CALL: KC5SHV

146.670	Shreveport, LA. PRIMARY NWS SKYWARN FREQUENCY
147.340	Longview, TX. PRIMARY EAST TEXAS REPEATER LINK TO 146.670
147.000	Tyler, TX
146.920	Henderson, TX
145.370	Lufkin, TX
146.850	Monroe, LA. PRIMARY SKYWARN FREQUENCY for Ouachita Parishthrough
	Jonesboro, LA 146.790 linked to Shreveport 146.670.
146.880	Natchitoches, LA
147.135	Carter Mountain, OK (links to Shreveport)
147.380	Ashdown, AR (tone100)
147.045	Nashville, AR

For more information about SKYWARN, or about amateur radio, contact...

Mark Frazier, KG4BFW	NWS,Shreveport LA	SKYWARN Director (318) 636-4594
J.D. Alexander, W5VMY	Shreveport, LA	SKYWARN Coordinator
Roger Ley, WA9RZL	Shreveport, LA	SKYWARN Coordinator
Mark Ketchell, N5MYH	Monroe, LA	SKYWARN Coordinator
Clint Cooper, KC5QWH	Mt. Pleasant, TX	SKYWARN Coordinator
Tom Trissell, KC5ILO	Clarksville, TX	SKYWARN Coordinator
Jerry Lentz, N4KI	Whiteoak, TX	SKYWARN Coordinator
Bob Sanford, KC5SMC	Tyler, TX	SKYWARN Coordinator
Darrell Toland, N5REO	Longview, TX	SKYWARN Coordinator
Clay Richardson, N5VGS	Gladewater, TX	SKYWARN Coordinator
Rusty Sanders	Nacogdoches, TX	SKYWARN Coordinator
Travis Newton, K5GRK	Lufkin, TX	SKYWARN Coordinator
Ken Patterson, N5QET	Gilmer, TX	SKYWARN Coordinator

NOAA WEATHER RADIO

NOAA Weather Radio (NWR) broadcasts National Weather Service forecasts, warnings, and more, 24 hours-a-day, seven days a week, 365 days-a-year. For around \$30 you can own a special weather radio that gives you instant access to valuable weather information **- information that might save your life**.

NOAA Weather Radio is not just for emergencies. It's a-round-the-clock source of weather reports and information that helps you prepare for the day ahead. Routine programming includes the current local weather conditions, 1-7 day forecast, and short term forecasts. Other more specialized information including Hazardous Weather Outlooks, Weather and Climatological summaries are broadcast at certain times during the day.

During hazardous weather conditions, NWR is a lifeline for critical weather information. Routine programming is interrupted when severe weather threatens so that the latest watches, warnings and statements may be broadcast immediately. The NWR is also the backbone of the Emergency Alert System (EAS) which allowing forecasters to provide almost instantaneous weather warnings through select broadcast media. When a watch or warning is issued it is also being implemented that will enable you to program your weather radio so that it only alarms for the counties you select.

The Shreveport NWS office is responsible for the operation of ten NWR transmitters...

STATION	LOCATION	FREQUENCY
WXJ-49	TEXARKANA, AR	162.550 MHZ
WXJ-97	SHREVEPORT, LA	162.400 MHZ
WXJ-96	MONROE, LA	162.550 MHZ
WXK-36	TYLER, TX	162.475 MHZ
WXK-23	LUFKIN, TX	162.550 MHZ
KWN-32	GILMER, TX	162.425 MHZ
WXJ-65	BROKEN ARROW, OK	162.450 MHZ
WXN-87	NATCHITOCHES, LA	162.500 MHZ
WNG-725	EL DORADO, AR	162.525 MHZ
WNG-650	CENTER, TX	162.525 MHZ
WNG-653	MARIETTA, TX	162.525 MHZ

For more information concerning NOAA Weather Radio, contact the National Weather Service in Shreveport, Louisiana.

SEVERE WEATHER IDENTIFICATION GUIDELINES

The National Weather Service (NWS) has defined a severe thunderstorm as one that produces:

- 1) hail 3/4 of an inch in diameter or larger (penny size)
- 2) wind at or above 58 MPH (50 knots); and or
- 3) a tornado.

When attempting to verify a warning, the NWS looks for these occurrences, in addition to other events that imply a severe thunderstorm, such as significant damage.

Use the following criteria when determining whether you are dealing with an actual severe weather event. REMEMBER, your severe weather reports are **VITAL** to the NWS, hours or even days after an event has occurred. Include the time and the exact location of the event when reporting.

THE FOLLOWING ARE CONSIDERED TO BE SEVERE EVENTS AND SHOULD BE REPORTED AS SOON AS POSSIBLE:

TORNADO

1) A credible report of a tornado on the ground. If the funnel extends ½ way or more from the base of the cloud to the ground, or if dirt/debris are seen on the ground underneath the funnel, it should always be reported as a tornado.

DAMAGING WINDS

- 1) Measured thunderstorm wind gusts of 58 MPH (50 knots) or more
- 2) Estimated thunderstorm wind gusts of 58 MPH (50 knots) or more from a certified spotter
- 3) Trees blown down or uprooted (more than 1)
- 4) Large limbs or branches blown down (more than 1)
- 5) Power lines blown down
- 6) Permanent signs blown down
- 7) Roof damage from the wind (large area of roofing material removed)
- 8) Windows broken by the wind
- 9) Radio tower or large antenna blown down
- 11) Home TV antennas blown down (more than 1)
- 12) Campers heavily damaged or destroyed
- 13) Mobile home damaged by wind

LARGE HAIL

- 1) Hail 3/4 of an inch in diameter or larger (size of a dime or penny)
- 2) Windows or windshields broken by hail
- 3) Roofs or house siding damaged by hail

IF YOU ARE IN DOUBT AS TO WHETHER AN EVENT/DAMAGE IS SEVERE OR NOT, MAKE THE REPORT ANYWAY!

HOW TO REPORT

- When possible, all reports should be passed to a central point for relay to the NWS. This
 may be the Sheriff's office, police department, emergency management office, Ham Radio
 Operator Controller, etc,.
- 2) Amateur radio reports should be relayed through the appropriate net to the NWS.
- 3) Individual spotters, and those who have no other options, should call the NWS direct using the 800 number provided (also enclosed in this guide for your convenience)
- 4) However you make your report, remember the following...

SAFETY FIRST - your safety is more important than your report!

KEEP YOUR REPORT VERY BRIEF - OTHERS WILL BE TRYING TO REPORT!

IDENTIFY YOURSELF AS A TRAINED AND CERTIFIED STORM SPOTTER!

GIVE YOUR **EXACT LOCATION** (county, nearest town, major intersection, etc)!

TELL WHAT YOU SAW (tornado, hail, wind, funnel cloud, etc.,)

GIVE THE TIME THE EVENT OCCURRED!

GIVE ANY OTHER IMPORTANT INFORMATION!

DO NOT EXPECT TO TALK TO A FORECASTER - THEY ARE ISSUING STATEMENTS AND WARNINGS TO THE MEDIA, NOAA WEATHER RADIO, ETC., AND TIME IS A LUXURY THEY DO NOT HAVE!

Here's an example: "My name is John Doe, I am a certified spotter in Ruston, Louisiana, Lincoln Parish. I am receiving quarter-size hail at this time 630 PM. The hail is covering the ground and has been falling for 10 minutes."

SEVERE WEATHER REPORTING PROCEDURES

WHAT TO REPORT

The National Weather Service relies heavily on YOUR report of severe or hazardous weather. The following occurrences should be reported IMMEDIATELY!

1) TORNADOES

- you may not see the funnel itself on the ground
- look for dust or debris on the ground underneath a funnel or wall cloud
- power flashes at night may indicate a tornado

2) FUNNEL CLOUDS

- look for organized, sustained rotation

3) WALL CLOUDS

- should be persistent (tens of minutes) and organized
- rotating wall clouds are extremely dangerous

4) HAIL

- report hail size and intensity
- report hail size in terms of well-known objects (coins, fruit) or in inches
- avoid using the term "MARBLE SIZE"

5) DAMAGING WINDS

-give best estimate of wind speed

6) STORM DAMAGE

- damage reports are extremely important!
- report any damage caused by hail, wind, flooding, or lightning

7) FLOODING

- report flooding that blocks streets, roads or highways
- report flooding that is a threat to life or property
- report excessive rainfall (more than one inch per hour)

8) WINTER WEATHER

- report any significant accumulation of snow or ice
- report significant problems caused by snow or ice

9) LIGHTNING

- report any damage or injuries caused by lightning

DAMAGING WIND SCALE BY FUJITA

Since we can't measure the wind speeds in tornadoes directly the NWS uses the FUJITA scale to estimate the maximum wind speed in a tornado based on the damage it left behind. The scale is very subjective and only provides a rough estimate of the tornado's strength, but it is the only widely-used classification system for tornadoes. The scale ranges from F0 to F5, with F0 and F1 tornadoes being classified as "weak" tornadoes, F2 and F3 as "strong" and F4 to F5 as "violent"

F0 Gale Tornado 40-72 MPH

Light damage. Some damage to chimneys, breaks branches off trees; pushes over shallow rooted trees; damages sign boards.

F1 Weak Tornado 73-112 MPH

Moderate damage. Peels surfaces off roofs; mobile homes pushed off foundations are overturned; moving autos pushed off the road; attached garages may be destroyed; some trees uprooted or snapped.

F2 Strong Tornado 113-157 MPH

Considerable damage; roofs torn off frame houses; mobile homes demolished; large trees snapped or uprooted; railroad cars pushed over; light object missiles generated; cars blown off highways.

F3 Severe Tornado 158-206 MPH

Severe Damage. Roofs and some walls torn off well constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off the ground and thrown.

F4 Devastating Tornado 207-260 MPH

Devastating damage. Well-constructed houses leveled; structures with weak foundations thrown for some distance; steel structures badly damaged; cars thrown and large missiles.

F5 Incredible Tornado 261-318 MPH

Incredible damage. Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile-sized missiles fly through the air in excess of 100 meters; trees debarked; steel-reinforced concrete structures badly damaged.

F6 Inconceivable Tornado 319-379 MPH

These winds are very unlikely. Even if they occurred, they wouldn't be recognizable.